

This workbook contains the Calculations to estimate new RPGs for the 20% worst days for Caney Creek and Upper B

Option 1 - all FIP controls under BART and SO₂ and NO_x controls on the Entergy Independence Facility

Option 2 - all FIP controls under BART and SO₂ controls on the Entergy Independence Facility

Description of Methodology -

Description of worksheets -

uffalo accounting for controls under BART and RP in the proposed FIP

- 1) 2018 CENRAP CAMx PSAT results for Arkansas point sources for sulfate and nitrate at each Arkansas Class I area from CENRAP 2007.mdb are scaled by the ratios of (2018 CENRAP Arkansas point source emissions minus reduction due to FIP controls) divided by point source emissions for SO₂ and NO_x
- 2) Total extinction at each Arkansas Class I area from 2018 CENRAP CAMx modeling is adjusted to reflect the scaled value
- 3) Percent reduction in total extinction between scaled value and modeled 2018 CENRAP CAMx value is calculated
- 4) Calculated percentage reduction is applied to 2018 CENRAP CMAQ calculated extinction (CENRAP TSD)
- 5) Total extinction is converted to dry deposition

Option 1 - Calculations for 2018 RPG based on scaling Arkansas sulfate and nitrate point source impacts from CAMx PSAT modeling due to controls under option 1

Option 2 - Calculations for 2018 RPG based on scaling Arkansas sulfate and nitrate point source impacts from CAMx PSAT modeling due to controls under option 2

EPA CAMD - annual emission inventory data for sources with FIP controls. Data from EPA Air Markets Program data, available at <https://www.epa.gov/air-markets-program>

DAYSoftheWK - Calculates the number of Mondays, weekdays, Saturdays, and Sundays for each month needed to estimate annual EI data. See CENRAP TSD Section 2 for additional information

2002 CENRAP EI - Facility annual emissions estimated from daily emission values for Monday, Weekday, Sat, and Sun for each facility. See Summary Project_Final Aug 2007.mdb

2018 CENRAP EI - Facility annual emissions estimated from daily emission values for Monday, Weekday, Sat, and Sun for each facility. See Summary Project_Final Aug 2007.mdb

down contributions from sulfate and nitrate

Facility	2002 CENRAP ¹		2018 CENRAP ¹	
	NOx (tpy)	SO2 (tpy)	NOx (tpy)	SO2 (tpy)
AECC - Carl E Bailey Generating Sta Total	149.36606	380.50435	0	0
DOMTAR INDUSTRIES INC- ASHDOWN MILL Total	3727.03275	2260.17015	3839.49543	2241.39995
Entergy Arkansas - Lake Catherine Total	1363.51007	4.10167	0	0
ENTERGY ARK-INDEPENDENCE Total	15593.03146	25014.7613	16121.40089	6786.1917
ENTERGY ARK-WHITE BLUFF Total	17055.5395	34787.11009	9242.0991	45969.6409
JOHN L MCCLELLAN GENERATING STATION Total	277.87033	451.17586	287.81265	0.11676
SWEPCO-FLINT CREEK POWER PLANT Total	5079.90054	11165.104	4334.51944	2896.1489
Grand Total	<i>43246.25071</i>	<i>74062.92742</i>	<i>33825.32751</i>	<i>7893.49826</i>

1Facility annual emissions calculated from daily emission values for Monday, Weekday, Sat, and Sun for each mont

2Controlled emissions are calculated from BART/RP control emission level and average heat input. Domtar, Bailey,

NOx
SO2

3 source category emissions f

SourceName	2018 CENRAP extinction due to Arkansas point source from 2018 CENRAP PSAT ⁴		Scaling Factor	2018 extinction due to Arkansas point
	CACR1	UPBU1		CACR1
SO4	3.07263	2.76009	0.35067	1.07749
NOx	0.24981	0.21195	0.87702	0.21909
Total	3.32245	2.97204		1.29658

	2018 CENRAP CAMx modeled extinction (1/Mm)		2018 CENRAP CAMx impairment (dv)	
	CACR1	UPBU1	CACR1	UPBU1
visibility impairment	85.84	86.16	22.80748	22.52975
rayleigh scattering	12	9		

Estimated 2018 RPG Adjusting 2018 CENRAP CMAQ modeled RPG

	CACR1	UPBU1
2018 CENRAP CMAQ modeled RPG (dv)	22.48	22.52
2018 CENRAP CMAQ modeled RPG (extinction, 1/Mm)	94.68779	95.06730
Reduce 2018 CMAQ RPG extinction by same percentage as calculated above for CAMx model results	92.72719	93.25080
Adjusted RPGs	22.27077	22.32708

Delta dv from FIP controls (2018 CMAQ Modeled and Scaled Impairment (dv))	0.20923	0.19292
---	---------	---------

Delta dv from FIP controls (2018 CMAQ Modeled and Scaled Impairment (dv))	CACR1	UPBU1
Option 1	0.20923	0.19292
Option 2	0.20647	0.19052
Difference Option 2 - Option 1	0.00276	0.00240

FIP control level	average annual heat input 2009-2013 (excluding max and min)	BART/RP controlled emissions		FIP emission reduction
		NOx (tpy)	SO2 (tpy)	NOx (tpy)
NOx 2009-2013 annual average excluding max and min, 0.5% S fuel oil		41.29833	10	-10
NOx reduced 461 tpy, SO2 reduced 1401 tpy		3378.49543	840.39995	1401
unit 4 and average annual emissions for units 1-3, burning only	2996659.86967	346.65617	0	0
0.06 lb/MMBtu SO2, 0.15 lb/MMBtu NOx	114605091.43867	8595.38186	3438.15274	23348.03901
0.06 lb/MMBtu SO2, 0.15 lb/MMBtu NOx	110990081.876	8324.25614	3329.70246	42639.93844
0.5% S Fuel oil		287.81265	75	-74.88324
0.06 lb/MMBtu SO2, 0.23 lb/MMBtu NOx	36071007.64967	4148.16588	1082.13023	1814.01867
		25122.06646	8775.38538	69128.11288

h from Pechan CENRAP EI Summary Project_Final Aug 2007.mdb (see 2002 CENRAP EI, 2018 CENRAP EI and DAYSo and McClellan controlled emissions from facility BART analysis

2018 CENRAP Arkansas Point Source Emissions (tpy) ³	FIP Emission reductions	Scaling factor
	Option 1	Option 1
71,107	8,745	0.8770
106,461	69,128	0.3507

rom CENRAP-EI-SUMMARY-080107wv_c6e.zip

2018 RPG

FIP Scaled 2018 extinction due to Arkansas point source	Reduction in Arkansas point source extinction	
	UPBU1	CACR1
	UPBU1	
0.96789	1.99515	1.79221
0.18588	0.03072	0.02606
1.15377	2.02587	1.81827

Total Reduction in extinction due to FIP controls		Scaled 2018 CAMx modeled extinction (1/Mm)		Scaled impairment (dv)
CACR1	UPBU1	CACR1	UPBU1	CACR1
2.02587	1.81827	83.81413	84.34173	22.59825
		12	9	

Percent Reduction in total extinction from FIP controls (2018 CENRAP CAMx modeled and Scaled extinction)	
2.071%	1.911%

controls (2018 CAMx Modeled and Scaled)
0.20923

Estimated delta dv at natural background due to FIP

	CACR1	UPBU1
NC-II average Natural Conditions (dv)	7.619	7.534
Natural Conditions (1/Mm)	21.42343	21.24210
NC plus extinction from FIP controls (1/Mm)	23.44930	23.06037
NC plus extinction from FIP controls (dv)	8.52255	8.35531
Delta dv	0.90355	0.82131

IP emission reduction

SO2 (tpy)

-41.29833
461
-346.65617
7526.01903
917.84296
0
186.35356
8744.55938

ftheWK worksheets)

8 Scaled impairment (dv)	
	UPBU1
	22.33682

dv from FIP controls (2018 Mx Modeled and Scaled Impairment (dv))	
	0.19292

Facility	2002 CENRAP ¹		2018 CENRAP ¹	
	NOx (tpy)	SO2 (tpy)	NOx (tpy)	SO2 (tpy)
AECC - Carl E Bailey Generating Sta Total	149.36606	380.50435	0	0
DOMTAR INDUSTRIES INC-ASHDOWN MILL Total	3727.03275	2260.17015	3839.49543	2241.39995
Entergy Arkansas - Lake Catherine Total	1363.51007	4.10167	0	0
ENTERGY ARK-INDEPENDENCE Total	15593.03146	25014.7613	16121.40089	6786.1917
ENTERGY ARK-WHITE BLUFF Total	17055.5395	34787.11009	9242.0991	45969.6409
JOHN L MCCLELLAN GENERATING STATION Total	277.87033	451.17586	287.81265	0.11676
SWEPCO-FLINT CREEK POWER PLANT Total	5079.90054	11165.104	4334.51944	2896.1489
Grand Total	43246.25071	74062.92742	33825.32751	7893.49826

1Facility annual emissions calculated from daily emission values for Monday, Weekday, Sat, and Sun for each mont
2Controlled emissions are calculated from BART/RP control emission level and average heat input. Domtar, Bailey,

NOx
SO2

3 source category emissions f

SourceName	2018 CENRAP extinction due to Arkansas point source from 2018 CENRAP PSAT ⁴		Scaling Factor	2018 extinction due to Arkansas point source
	CACR1	UPBU1		CACR1

SO4	3.07263	2.76009	0.35067	1.07749
NOx	0.24981	0.21195	0.98286	0.24553
Total	3.32245	2.97204		1.32302

4CENRAP-PSAT-Tool-ENVIRON-Aug27-2007.mdb

	2018 CENRAP CAMx modeled extinction (1/Mm)		2018 CENRAP CAMx impairment (dv)	
	CACR1	UPBU1	CACR1	UPBU1
visibility impairment	85.84	86.16	22.80748	22.52975
rayleigh scattering	12	9		

Estimated 2018 RPG Adjusting 2018 CENRAP CMAQ modeled RPG

	CACR1	UPBU1
2018 CENRAP CMAQ modeled RPG (dv)	22.48	22.52
2018 CENRAP CMAQ modeled RPG (extinction, 1/Mm)	94.68779	95.06730
Reduce 2018 CMAQ RPG extinction by same percentage as calculated above for CAMx model results	92.75278	93.27321
Adjusted RPGs	22.27353	22.32948

Delta dv from FIP controls (2018 CMAQ Modeled and Scaled Impairment (dv))	0.20647	0.19052
---	---------	---------

Delta dv from FIP controls (2018 CMAQ Modeled and Scaled Impairment (dv))	CACR1	UPBU1
Option 1	0.20923	0.19292
Option 2	0.20647	0.19052

Difference Option 2 - Option 1	0.00276	0.00240
---------------------------------------	---------	---------

FIP control level	average annual heat input 2009-2013 (excluding max and min)	BART/RP controlled emissions		FIP emission reduction
		NOx (tpy)	SO2 (tpy)	NOx (tpy)
NOx 2009-2013 annual average excluding max and min, 0.5% S fuel oil		41.29833	10	-10
NOx reduced 461 tpy, SO2 reduced 1401 tpy		3378.49543	840.39995	1401
0.22lb/Mmbtu NOx for unit 4 and average annual emissions for units 1-3, burning only NG	2996659.86967	346.65617	0	0
0.06 lb/MMBtu SO2, 0.15 lb/MMBtu NOx	114605091.43867	16121.40089	3438.15274	23348.03901
0.06 lb/MMBtu SO2, 0.15 lb/MMBtu NOx	110990081.876	8324.25614	3329.70246	42639.93844
0.5% S Fuel oil		287.81265	75	-74.88324
0.06 lb/MMBtu SO2, 0.23 lb/MMBtu NOx	36071007.64967	4148.16588	1082.13023	1814.01867
		32648.08549	8775.38538	69128.11288

h from Pechan CENRAP EI Summary Project_Final Aug 2007.mdb (see 2002 CENRAP EI, 2018 CENRAP EI and DAYSo and McClellan controlled emissions from facility BART analysis

2018 CENRAP Arkansas Point Source Emissions (tpy) ³	FIP Emission reductions	Scaling factor
	Option 1	Option 1
71,107	1,219	0.9829
106,461	69,128	0.3507

rom CENRAP-EI-SUMMARY-080107wv_c6e.zip

2018 RPG

FIP Scaled 2018 extinction due to Arkansas point source	Reduction in Arkansas point source extinction	
	UPBU1	UPBU1
	CACR1	UPBU1

0.96789	1.99515	1.79221
0.20832	0.00428	0.00363
1.17620	1.99943	1.79584

Total Reduction in extinction due to FIP controls		Scaled 2018 CAMx modeled extinction (1/Mm) 2018		Scaled impairment (dv)
CACR1	UPBU1	CACR1	UPBU1	CACR1
1.99943	1.79584	83.84057	84.36416	22.60101
		12	9	

Percent Reduction in total extinction from FIP controls (2018 CENRAP CAMx modeled and Scaled extinction)	
2.044%	1.887%

controls (2018 CAMx Modeled and Scaled)
0.20647

Estimated delta dv at natural background due to FIP

	CACR1	UPBU1
NC-II average Natural Conditions (dv)	7.619	7.534
Natural Conditions (1/Mm)	21.42343	21.24210
NC plus extinction from FIP controls (1/Mm)	23.42286	23.03794
NC plus extinction from FIP controls (dv)	8.51127	8.34557
Delta dv	0.89227	0.81157

IP emission reduction

SO2 (tpy)

-41.29833
461
-346.65617
0
917.84296
0
186.35356
1218.54035

ftheWK worksheets)

8 Scaled impairment (dv)	
	UPBU1
	22.33922

dv from FIP controls (2018 Mix Modeled and Scaled Impairment (dv))	
	0.19052

	2001	2002	2003	2004	2005	2006
SO2 (tpy)						
Carl Bailey	1560.006	380.279	434.511	1193.956	220.403	149.074
Flint Creek Power Plant	14531.152	10961.213	9429.045	10098.571	8227.253	8526.449
Independence	23015.138	24613.833	22140.18	23588.239	22363.256	26172.297
Lake Catherine	5.032	4.067	1.754	0.572	0.736	0.088
McClellan	2369.913	440.674	1668.734	2089.962	461.214	441.11
White Bluff	36715.823	34151.42	39303.695	44497.997	34889.863	38122.068

	2001	2002	2003	2004	2005	2006
NOx (tpy)						
Carl Bailey	343.662	147.79	92.563	264.028	138.203	36.815
Flint Creek Power Plant	5940.657	5095.808	4755.575	4944.856	4627.796	5460.765
Independence	18559.994	16314.772	15743.107	15520.502	13171.061	14662.846
Lake Catherine	2060.917	1570.033	547.766	140.483	204.357	25.58
McClellan	545.167	278.436	312.515	444.042	205.248	159.97
White Bluff	19159.856	17704.706	19016.176	18206.888	16262.701	14155.37

	2001	2002	2003	2004	2005	2006
Heat input (MMBtu/yr)						
Carl Bailey	847752.27	206487.89	649595.69	216436.29	248079.86	305417.91
Flint Creek Power Plant	0116045.9	15334.175	4349825.4	8817679.1	71749.225	415630.95
Independence	86861.125	14326.125	365745.55	63596.054	47210.057	705200.25
Lake Catherine	72257.825	555133.65	46215.525	08853.367	49652.698	91724.076
McClellan	58881.549	51265.005	60287.609	50587.827	49518.562	35991.138
White Bluff	61358.425	773662.65	3065625.7	79576.092	86109.633	63234.549

	2001	2002	2003	2004	2005	2006
SO2 Rate (lb/MMBtu)						
Carl Bailey	1.09561	0.63039	1.33779	1.07737	0.35319	0.97620
Flint Creek Power Plant	0.72446	0.57819	0.54900	0.52031	0.46257	0.45577
Independence	0.36163	0.41259	0.37410	0.39490	0.39882	0.43009
Lake Catherine	0.00060	0.00060	0.00060	0.00060	0.00060	0.00060

McClellan	1.41113	0.45168	1.54492	1.46634	0.55921	0.57437
White Bluff	0.65237	0.67778	0.69524	0.73020	0.65407	0.71414

<i>NOx rate (lb/MMBtu)</i>	2001	2002	2003	2004	2005	2006
Carl Bailey	0.24136	0.24499	0.28499	0.23825	0.22146	0.24108
Flint Creek Power Plant	0.29617	0.26880	0.27689	0.25477	0.26020	0.29190
Independence	0.29162	0.27348	0.26601	0.25984	0.23489	0.24096
Lake Catherine	0.24575	0.23165	0.18739	0.14719	0.16685	0.17537
McClellan	0.32461	0.28539	0.28933	0.31154	0.24886	0.20830
White Bluff	0.34043	0.35138	0.33637	0.29877	0.30487	0.26517

Lake Catherine

<i>NOx (tpy)</i>	2001	2002	2003	2004	2005	2006
unit 1	108.031	43.499		0.387	4.409	
unit 2	125.252	53.1		0.075	2.173	
unit 3	103.433	52.364	7.649	0.05	1.858	
unit 4	1724.201	1421.07	540.117	139.971	195.917	25.58

Lake Catherine

<i>SO2 (tpy)</i>	2001	2002	2003	2004	2005	2006
unit 1	0.187	0.079		0.001	0.004	
unit 2	0.182	0.07		0	0.003	
unit 3	0.335	0.193	0.023	0	0.005	
unit 4	4.328	3.725	1.731	0.571	0.724	0.088

Lake Catherine

<i>HI (MMBtu/yr)</i>	2001	2002	2003	2004	2005	2006
unit 1	21638.325	63536.375		3076.6	11900.875	
unit 2	606500.45	32715.775		1028.65	8813.15	
unit 3	16149.425	43331.075	75960.55	647.1	15883.68	
unit 4	27969.625	15550.425	70254.975	04101.017	13054.993	91724.076

Lake Catherine

<i>SO2 rate (lb/MMBtu)</i>	2001	2002	2003	2004	2005	2006
----------------------------	------	------	------	------	------	------

unit 1	0.00060	0.00060	#DIV/0!	0.00065	0.00067	#DIV/0!
unit 2	0.00060	0.00060	#DIV/0!	0	0.00068	#DIV/0!
unit 3	0.00060	0.0006	0.00061	0	0.00063	#DIV/0!
unit 4	0.00060	0.00060	0.00060	0.00060	0.00060	0.00060

Lake Catherine

<i>NOx rate (lb/MMBtu)</i>	2001	2002	2003	2004	2005	2006
unit 1	0.34757	0.33012	#DIV/0!	0.25158	0.74095	#DIV/0!
unit 2	0.41303	0.45635	#DIV/0!	0.14582	0.49313	#DIV/0!
unit 3	0.18534	0.16279	0.20139	0.15454	0.23395	#DIV/0!
unit 4	0.23901	0.22892	0.18721	0.14702	0.16238	0.17537

2007	2008	2009	2010	2011	2012	2013	2009-2013 average (excluding min and max)
5.459	2.074	44.905	46.428	36.394	0.18	10.513	30.604
8722.594	8501.698	6811.486	8506.178	8618.775	8409.396	6699.391	7909.02
29538.868	26448.23	27425.294	28674.644	30397.963	32973.75	28854.282	29308.963
0.124	0.355	0.425	0.541	0.454	2.216	1.768	0.921
433.467	378.96	395.428	55.206	24.603	14.212	20.837	33.54867
33515.241	37938.569	33831.8	28464.344	31684.363	31687.164	34196.256	32401.109

2007	2008	2009	2010	2011	2012	2013	2009-2013 average (excluding min and max)
16.159	16.617	22.587	36.66	92.722	64.648	15.634	41.29833
5345.459	4919.11	3782.247	4879.983	5323.612	5455.769	4277.576	4827.057
17353.184	15123.051	14338.106	14618.656	13410.679	11066.772	10714.403	12938.519
89.304	119.088	191.427	152.372	149.156	938.223	855.28	399.693
235.764	254.114	165.513	316.42	413.142	331.633	292.185	313.41267
13899.686	16472.099	14523.365	15806.461	16012.686	14235.626	18046.844	15447.504

2007	2008	2009	2010	2011	2012	2013	2009-2013 average (excluding min and max)
110986.65	187864.47	213572.96	432444.71	681341.89	599338.83	160257.15	415118.83333
81500.325	63054.017	12386.308	89221.879	41329.107	578106.92	745694.15	36071007.64967
07665.828	66628.431	815526.08	838142.02	45584.195	54164.041	75361.246	114605091.43867
412125.388	86846.753	15814.997	04235.538	14550.499	86910.013	93812.694	3070866.24367
02430.024	97924.437	36218.192	44251.289	02579.251	29814.919	40685.869	2471584.02567
64262.111	81711.907	59789.218	60640.859	49815.551	32720.244	56100.277	110990081.876

2007	2008	2009	2010	2011	2012	2013	2009-2013 average (excluding min and max)
0.09837	0.02208	0.42051	0.21472	0.10683	0.00060	0.13120	0.15092
0.45571	0.46001	0.46956	0.46117	0.43265	0.42495	0.42207	0.43959
0.43791	0.44463	0.46556	0.48258	0.53590	0.58592	0.55237	0.52362
0.00060	0.00060	0.00060	0.00060	0.00060	0.00060	0.00060	0.00060

0.43294	0.30342	0.48334	0.04517	0.01821	0.01170	0.01640		0.02659
0.62201	0.65197	0.61986	0.50486	0.57063	0.59266	0.57253		0.57861

2007	2008	2009	2010	2011	2012	2013		
0.29119	0.17690	0.21152	0.16955	0.27217	0.21573	0.19511		
0.27927	0.26616	0.26073	0.26458	0.26724	0.27570	0.26949		
0.25726	0.25424	0.24340	0.24603	0.23642	0.19665	0.20511		
0.43338	0.20068	0.27041	0.16890	0.19696	0.25402	0.29023		
0.23548	0.20346	0.20231	0.25891	0.30574	0.27297	0.23000		
0.25796	0.28307	0.26609	0.28035	0.28839	0.26625	0.30215		

2007	2008	2009	2010	2011	2012	2013	2009-2013 average (excluding min and max)
	3.973		0.026	1.522			0.774
	0.568		1.456	0.609	1.542		1.20233
	1.259		0.345	1.876	9.137	48.831	15.04725
89.304	113.288	191.427	150.545	145.149	927.544	806.449	382.807

2007	2008	2009	2010	2011	2012	2013	2009-2013 average (excluding min and max)
	0.003		0	0.002			0.001
	0.001		0.001	0	0.001		0.00067
	0.003		0	0.002	0.011	0.061	0.0185
0.124	0.348	0.425	0.54	0.45	2.204	1.707	0.899

2007	2008	2009	2010	2011	2012	2013	2009-2013 average (excluding min and max)
	10939.05		125.2	6822.737			3473.9685
	3085.7		2703.75	1131.74	2863.214		2232.90133
	11509.847		1431.536	7783.524	37914.437	02620.635	62437.533
412125.386	1312.156	15814.997	99975.052	98812.498	46132.362	91192.059	2996659.86967

2007	2008	2009	2010	2011	2012	2013	
------	------	------	------	------	------	------	--

#DIV/0!	0.00055	#DIV/0!	0	0.00059	#DIV/0!	#DIV/0!		
#DIV/0!	0.00065	#DIV/0!	0.00074	0	0.00070	#DIV/0!		
#DIV/0!	0.00052	#DIV/0!	0	0.00051	0.00058	0.00060		
0.00060	0.00060	0.00060	0.0006	0.00060	0.00060	0.00060		

2007	2008	2009	2010	2011	2012	2013		
#DIV/0!	0.72639	#DIV/0!	0.41534	0.44616	#DIV/0!	#DIV/0!		
#DIV/0!	0.36815	#DIV/0!	1.07702	1.07622	1.07711	#DIV/0!		
#DIV/0!	0.21877	#DIV/0!	0.48200	0.48204	0.48198	0.48199		
0.43338	0.19510	0.27041	0.16727	0.19369	0.25253	0.28340		

DATE	DAY_OF_WK	#ofday type per month	
01/04/2002	Friday	1Friday	4
01/05/2002	Saturday	1Saturday	4
01/06/2002	Sunday	1Sunday	6
01/07/2002	Weekday	1Weekday	17
02/02/2002	Saturday	2Saturday	4
02/03/2002	Sunday	2Sunday	4
02/04/2002	Monday	2Monday	4
02/05/2002	Weekday	2Weekday	16
03/02/2002	Saturday	3Saturday	4
03/03/2002	Sunday	3Sunday	7
03/04/2002	Monday	3Monday	4
03/05/2002	Weekday	3Weekday	16
04/02/2002	Weekday	4Weekday	17
04/06/2002	Saturday	4Saturday	4
04/07/2002	Sunday	4Sunday	4
04/08/2002	Monday	4Monday	5
05/04/2002	Saturday	5Saturday	4
05/05/2002	Sunday	5Sunday	6
05/06/2002	Monday	5Monday	3
05/07/2002	Weekday	5Weekday	18
06/03/2002	Monday	6Monday	4
06/04/2002	Weekday	6Weekday	16
06/08/2002	Saturday	6Saturday	5
06/09/2002	Sunday	6Sunday	5
07/03/2002	Weekday	7Weekday	16
07/06/2002	Saturday	7Saturday	4
07/07/2002	Sunday	7Sunday	6
07/08/2002	Monday	7Monday	5
08/03/2002	Saturday	8Saturday	5
08/04/2002	Sunday	8Sunday	4
08/05/2002	Monday	8Monday	4
08/06/2002	Weekday	8Weekday	18
09/07/2002	Saturday	9Saturday	4
09/08/2002	Sunday	9Sunday	7
09/09/2002	Monday	9Monday	4
09/10/2002	Weekday	9Weekday	15
10/05/2002	Saturday	10Saturday	4
10/06/2002	Sunday	10Sunday	4
10/07/2002	Monday	10Monday	4
10/08/2002	Weekday	10Weekda	19
11/02/2002	Saturday	11Saturday	4
11/03/2002	Sunday	11Sunday	7
11/04/2002	Monday	11Monday	4
11/05/2002	Weekday	11Weekda	15

12/07/2002	Saturday	12Saturday	4
12/08/2002	Sunday	12Sunday	8
12/09/2002	Monday	12Monday	5
12/10/2002	Weekday	12Weekda	14

DATE	DAY_OF_WK
------	-----------

1/1/2002	Tuesday	Sunday	1Sunday
1/2/2002	Wednesday	sunday	1sunday
1/3/2002	Thursday	Weekday	1Weekday
1/4/2002	Friday	Friday	1Friday
1/5/2002	Saturday	Saturday	1Saturday
1/6/2002	Sunday	Sunday	1Sunday
1/7/2002	Monday	Weekday	1Weekday
1/8/2002	Tuesday	Weekday	1Weekday
1/9/2002	Wednesday	Weekday	1Weekday
1/10/2002	Thursday	Weekday	1Weekday
1/11/2002	Friday	Friday	1Friday
1/12/2002	Saturday	Saturday	1Saturday
1/13/2002	Sunday	Sunday	1Sunday
1/14/2002	Monday	Weekday	1Weekday
1/15/2002	Tuesday	Weekday	1Weekday
1/16/2002	Wednesday	Weekday	1Weekday
1/17/2002	Thursday	Weekday	1Weekday
1/18/2002	Friday	Friday	1Friday
1/19/2002	Saturday	Saturday	1Saturday
1/20/2002	Sunday	Sunday	1Sunday
1/21/2002	Monday	Weekday	1Weekday
1/22/2002	Tuesday	Weekday	1Weekday
1/23/2002	Wednesday	Weekday	1Weekday
1/24/2002	Thursday	Weekday	1Weekday
1/25/2002	Friday	Friday	1Friday
1/26/2002	Saturday	Saturday	1Saturday
1/27/2002	Sunday	Sunday	1Sunday
1/28/2002	Monday	Weekday	1Weekday
1/29/2002	Tuesday	Weekday	1Weekday
1/30/2002	Wednesday	Weekday	1Weekday
1/31/2002	Thursday	Weekday	1Weekday
2/1/2002	Friday	Weekday	2Weekday
2/2/2002	Saturday	Saturday	2Saturday
2/3/2002	Sunday	Sunday	2Sunday
2/4/2002	Monday	Monday	2Monday
2/5/2002	Tuesday	Weekday	2Weekday
2/6/2002	Wednesday	Weekday	2Weekday
2/7/2002	Thursday	Weekday	2Weekday
2/8/2002	Friday	Weekday	2Weekday
2/9/2002	Saturday	Saturday	2Saturday
2/10/2002	Sunday	Sunday	2Sunday
2/11/2002	Monday	Monday	2Monday
2/12/2002	Tuesday	Weekday	2Weekday
2/13/2002	Wednesday	Weekday	2Weekday

note
 holiday/Sunday
 holiday/Sunday

2/14/2002	Thursday	Weekday	2Weekday	
2/15/2002	Friday	Weekday	2Weekday	
2/16/2002	Saturday	Saturday	2Saturday	
2/17/2002	Sunday	Sunday	2Sunday	
2/18/2002	Monday	Monday	2Monday	
2/19/2002	Tuesday	Weekday	2Weekday	
2/20/2002	Wednesday	Weekday	2Weekday	
2/21/2002	Thursday	Weekday	2Weekday	
2/22/2002	Friday	Weekday	2Weekday	
2/23/2002	Saturday	Saturday	2Saturday	
2/24/2002	Sunday	Sunday	2Sunday	
2/25/2002	Monday	Monday	2Monday	
2/26/2002	Tuesday	Weekday	2Weekday	
2/27/2002	Wednesday	Weekday	2Weekday	
2/28/2002	Thursday	Weekday	2Weekday	
3/1/2002	Friday	Weekday	3Weekday	
3/2/2002	Saturday	Saturday	3Saturday	
3/3/2002	Sunday	Sunday	3Sunday	
3/4/2002	Monday	Monday	3Monday	
3/5/2002	Tuesday	Weekday	3Weekday	
3/6/2002	Wednesday	Weekday	3Weekday	
3/7/2002	Thursday	Weekday	3Weekday	
3/8/2002	Friday	Weekday	3Weekday	
3/9/2002	Saturday	Saturday	3Saturday	
3/10/2002	Sunday	Sunday	3Sunday	
3/11/2002	Monday	Monday	3Monday	
3/12/2002	Tuesday	Weekday	3Weekday	
3/13/2002	Wednesday	Weekday	3Weekday	
3/14/2002	Thursday	Weekday	3Weekday	
3/15/2002	Friday	Weekday	3Weekday	
3/16/2002	Saturday	Saturday	3Saturday	
3/17/2002	Sunday	Sunday	3Sunday	
3/18/2002	Monday	Monday	3Monday	
3/19/2002	Tuesday	Weekday	3Weekday	
3/20/2002	Wednesday	Weekday	3Weekday	
3/21/2002	Thursday	Weekday	3Weekday	
3/22/2002	Friday	Weekday	3Weekday	
3/23/2002	Saturday	Saturday	3Saturday	
3/24/2002	Sunday	Sunday	3Sunday	
3/25/2002	Monday	Monday	3Monday	
3/26/2002	Tuesday	Weekday	3Weekday	
3/27/2002	Wednesday	Weekday	3Weekday	
3/28/2002	Thursday	Weekday	3Weekday	
3/29/2002	Friday	sunday	3sunday	holiday/Sunday
3/30/2002	Saturday	sunday	3sunday	holiday/Sunday

3/31/2002	Sunday	Sunday	3Sunday
4/1/2002	Monday	Monday	4Monday
4/2/2002	Tuesday	Weekday	4Weekday
4/3/2002	Wednesday	Weekday	4Weekday
4/4/2002	Thursday	Weekday	4Weekday
4/5/2002	Friday	Weekday	4Weekday
4/6/2002	Saturday	Saturday	4Saturday
4/7/2002	Sunday	Sunday	4Sunday
4/8/2002	Monday	Monday	4Monday
4/9/2002	Tuesday	Weekday	4Weekday
4/10/2002	Wednesday	Weekday	4Weekday
4/11/2002	Thursday	Weekday	4Weekday
4/12/2002	Friday	Weekday	4Weekday
4/13/2002	Saturday	Saturday	4Saturday
4/14/2002	Sunday	Sunday	4Sunday
4/15/2002	Monday	Monday	4Monday
4/16/2002	Tuesday	Weekday	4Weekday
4/17/2002	Wednesday	Weekday	4Weekday
4/18/2002	Thursday	Weekday	4Weekday
4/19/2002	Friday	Weekday	4Weekday
4/20/2002	Saturday	Saturday	4Saturday
4/21/2002	Sunday	Sunday	4Sunday
4/22/2002	Monday	Monday	4Monday
4/23/2002	Tuesday	Weekday	4Weekday
4/24/2002	Wednesday	Weekday	4Weekday
4/25/2002	Thursday	Weekday	4Weekday
4/26/2002	Friday	Weekday	4Weekday
4/27/2002	Saturday	Saturday	4Saturday
4/28/2002	Sunday	Sunday	4Sunday
4/29/2002	Monday	Monday	4Monday
4/30/2002	Tuesday	Weekday	4Weekday
5/1/2002	Wednesday	Weekday	5Weekday
5/2/2002	Thursday	Weekday	5Weekday
5/3/2002	Friday	Weekday	5Weekday
5/4/2002	Saturday	Saturday	5Saturday
5/5/2002	Sunday	Sunday	5Sunday
5/6/2002	Monday	Monday	5Monday
5/7/2002	Tuesday	Weekday	5Weekday
5/8/2002	Wednesday	Weekday	5Weekday
5/9/2002	Thursday	Weekday	5Weekday
5/10/2002	Friday	Weekday	5Weekday
5/11/2002	Saturday	Saturday	5Saturday
5/12/2002	Sunday	Sunday	5Sunday
5/13/2002	Monday	Monday	5Monday
5/14/2002	Tuesday	Weekday	5Weekday

5/15/2002	Wednesday	Weekday	5Weekday	
5/16/2002	Thursday	Weekday	5Weekday	
5/17/2002	Friday	Weekday	5Weekday	
5/18/2002	Saturday	Saturday	5Saturday	
5/19/2002	Sunday	Sunday	5Sunday	
5/20/2002	Monday	Monday	5Monday	
5/21/2002	Tuesday	Weekday	5Weekday	
5/22/2002	Wednesday	Weekday	5Weekday	
5/23/2002	Thursday	Weekday	5Weekday	
5/24/2002	Friday	Weekday	5Weekday	
5/25/2002	Saturday	Saturday	5Saturday	
5/26/2002	Sunday	Sunday	5Sunday	
5/27/2002	Monday	sunday	5sunday	holiday/Sunday
5/28/2002	Tuesday	sunday	5sunday	holiday/Sunday
5/29/2002	Wednesday	Weekday	5Weekday	
5/30/2002	Thursday	Weekday	5Weekday	
5/31/2002	Friday	Weekday	5Weekday	
6/1/2002	Saturday	Saturday	6Saturday	
6/2/2002	Sunday	Sunday	6Sunday	
6/3/2002	Monday	Monday	6Monday	
6/4/2002	Tuesday	Weekday	6Weekday	
6/5/2002	Wednesday	Weekday	6Weekday	
6/6/2002	Thursday	Weekday	6Weekday	
6/7/2002	Friday	Weekday	6Weekday	
6/8/2002	Saturday	Saturday	6Saturday	
6/9/2002	Sunday	Sunday	6Sunday	
6/10/2002	Monday	Monday	6Monday	
6/11/2002	Tuesday	Weekday	6Weekday	
6/12/2002	Wednesday	Weekday	6Weekday	
6/13/2002	Thursday	Weekday	6Weekday	
6/14/2002	Friday	Weekday	6Weekday	
6/15/2002	Saturday	Saturday	6Saturday	
6/16/2002	Sunday	Sunday	6Sunday	
6/17/2002	Monday	Monday	6Monday	
6/18/2002	Tuesday	Weekday	6Weekday	
6/19/2002	Wednesday	Weekday	6Weekday	
6/20/2002	Thursday	Weekday	6Weekday	
6/21/2002	Friday	Weekday	6Weekday	
6/22/2002	Saturday	Saturday	6Saturday	
6/23/2002	Sunday	Sunday	6Sunday	
6/24/2002	Monday	Monday	6Monday	
6/25/2002	Tuesday	Weekday	6Weekday	
6/26/2002	Wednesday	Weekday	6Weekday	
6/27/2002	Thursday	Weekday	6Weekday	
6/28/2002	Friday	Weekday	6Weekday	

6/29/2002	Saturday	Saturday	6Saturday	
6/30/2002	Sunday	Sunday	6Sunday	
7/1/2002	Monday	Monday	7Monday	
7/2/2002	Tuesday	Weekday	7Weekday	
7/3/2002	Wednesday	Weekday	7Weekday	
7/4/2002	Thursday	sunday	7sunday	holiday/Sunday
7/5/2002	Friday	sunday	7sunday	holiday/Sunday
7/6/2002	Saturday	Saturday	7Saturday	
7/7/2002	Sunday	Sunday	7Sunday	
7/8/2002	Monday	Monday	7Monday	
7/9/2002	Tuesday	Weekday	7Weekday	
7/10/2002	Wednesday	Weekday	7Weekday	
7/11/2002	Thursday	Weekday	7Weekday	
7/12/2002	Friday	Weekday	7Weekday	
7/13/2002	Saturday	Saturday	7Saturday	
7/14/2002	Sunday	Sunday	7Sunday	
7/15/2002	Monday	Monday	7Monday	
7/16/2002	Tuesday	Weekday	7Weekday	
7/17/2002	Wednesday	Weekday	7Weekday	
7/18/2002	Thursday	Weekday	7Weekday	
7/19/2002	Friday	Weekday	7Weekday	
7/20/2002	Saturday	Saturday	7Saturday	
7/21/2002	Sunday	Sunday	7Sunday	
7/22/2002	Monday	Monday	7Monday	
7/23/2002	Tuesday	Weekday	7Weekday	
7/24/2002	Wednesday	Weekday	7Weekday	
7/25/2002	Thursday	Weekday	7Weekday	
7/26/2002	Friday	Weekday	7Weekday	
7/27/2002	Saturday	Saturday	7Saturday	
7/28/2002	Sunday	Sunday	7Sunday	
7/29/2002	Monday	Monday	7Monday	
7/30/2002	Tuesday	Weekday	7Weekday	
7/31/2002	Wednesday	Weekday	7Weekday	
8/1/2002	Thursday	Weekday	8Weekday	
8/2/2002	Friday	Weekday	8Weekday	
8/3/2002	Saturday	Saturday	8Saturday	
8/4/2002	Sunday	Sunday	8Sunday	
8/5/2002	Monday	Monday	8Monday	
8/6/2002	Tuesday	Weekday	8Weekday	
8/7/2002	Wednesday	Weekday	8Weekday	
8/8/2002	Thursday	Weekday	8Weekday	
8/9/2002	Friday	Weekday	8Weekday	
8/10/2002	Saturday	Saturday	8Saturday	
8/11/2002	Sunday	Sunday	8Sunday	
8/12/2002	Monday	Monday	8Monday	

8/13/2002	Tuesday	Weekday	8Weekday	
8/14/2002	Wednesday	Weekday	8Weekday	
8/15/2002	Thursday	Weekday	8Weekday	
8/16/2002	Friday	Weekday	8Weekday	
8/17/2002	Saturday	Saturday	8Saturday	
8/18/2002	Sunday	Sunday	8Sunday	
8/19/2002	Monday	Monday	8Monday	
8/20/2002	Tuesday	Weekday	8Weekday	
8/21/2002	Wednesday	Weekday	8Weekday	
8/22/2002	Thursday	Weekday	8Weekday	
8/23/2002	Friday	Weekday	8Weekday	
8/24/2002	Saturday	Saturday	8Saturday	
8/25/2002	Sunday	Sunday	8Sunday	
8/26/2002	Monday	Monday	8Monday	
8/27/2002	Tuesday	Weekday	8Weekday	
8/28/2002	Wednesday	Weekday	8Weekday	
8/29/2002	Thursday	Weekday	8Weekday	
8/30/2002	Friday	Weekday	8Weekday	
8/31/2002	Saturday	Saturday	8Saturday	
9/1/2002	Sunday	Sunday	9Sunday	
9/2/2002	Monday	sunday	9sunday	holiday/Sunday
9/3/2002	Tuesday	sunday	9sunday	holiday/Sunday
9/4/2002	Wednesday	Weekday	9Weekday	
9/5/2002	Thursday	Weekday	9Weekday	
9/6/2002	Friday	Weekday	9Weekday	
9/7/2002	Saturday	Saturday	9Saturday	
9/8/2002	Sunday	Sunday	9Sunday	
9/9/2002	Monday	Monday	9Monday	
9/10/2002	Tuesday	Weekday	9Weekday	
9/11/2002	Wednesday	Weekday	9Weekday	
9/12/2002	Thursday	Weekday	9Weekday	
9/13/2002	Friday	Weekday	9Weekday	
9/14/2002	Saturday	Saturday	9Saturday	
9/15/2002	Sunday	Sunday	9Sunday	
9/16/2002	Monday	Monday	9Monday	
9/17/2002	Tuesday	Weekday	9Weekday	
9/18/2002	Wednesday	Weekday	9Weekday	
9/19/2002	Thursday	Weekday	9Weekday	
9/20/2002	Friday	Weekday	9Weekday	
9/21/2002	Saturday	Saturday	9Saturday	
9/22/2002	Sunday	Sunday	9Sunday	
9/23/2002	Monday	Monday	9Monday	
9/24/2002	Tuesday	Weekday	9Weekday	
9/25/2002	Wednesday	Weekday	9Weekday	
9/26/2002	Thursday	Weekday	9Weekday	

9/27/2002	Friday	Weekday	9Weekday
9/28/2002	Saturday	Saturday	9Saturday
9/29/2002	Sunday	Sunday	9Sunday
9/30/2002	Monday	Monday	9Monday
10/1/2002	Tuesday	Weekday	10Weekday
10/2/2002	Wednesday	Weekday	10Weekday
10/3/2002	Thursday	Weekday	10Weekday
10/4/2002	Friday	Weekday	10Weekday
10/5/2002	Saturday	Saturday	10Saturday
10/6/2002	Sunday	Sunday	10Sunday
10/7/2002	Monday	Monday	10Monday
10/8/2002	Tuesday	Weekday	10Weekday
10/9/2002	Wednesday	Weekday	10Weekday
10/10/2002	Thursday	Weekday	10Weekday
10/11/2002	Friday	Weekday	10Weekday
10/12/2002	Saturday	Saturday	10Saturday
10/13/2002	Sunday	Sunday	10Sunday
10/14/2002	Monday	Monday	10Monday
10/15/2002	Tuesday	Weekday	10Weekday
10/16/2002	Wednesday	Weekday	10Weekday
10/17/2002	Thursday	Weekday	10Weekday
10/18/2002	Friday	Weekday	10Weekday
10/19/2002	Saturday	Saturday	10Saturday
10/20/2002	Sunday	Sunday	10Sunday
10/21/2002	Monday	Monday	10Monday
10/22/2002	Tuesday	Weekday	10Weekday
10/23/2002	Wednesday	Weekday	10Weekday
10/24/2002	Thursday	Weekday	10Weekday
10/25/2002	Friday	Weekday	10Weekday
10/26/2002	Saturday	Saturday	10Saturday
10/27/2002	Sunday	Sunday	10Sunday
10/28/2002	Monday	Monday	10Monday
10/29/2002	Tuesday	Weekday	10Weekday
10/30/2002	Wednesday	Weekday	10Weekday
10/31/2002	Thursday	Weekday	10Weekday
11/1/2002	Friday	Weekday	11Weekday
11/2/2002	Saturday	Saturday	11Saturday
11/3/2002	Sunday	Sunday	11Sunday
11/4/2002	Monday	Monday	11Monday
11/5/2002	Tuesday	Weekday	11Weekday
11/6/2002	Wednesday	Weekday	11Weekday
11/7/2002	Thursday	Weekday	11Weekday
11/8/2002	Friday	Weekday	11Weekday
11/9/2002	Saturday	Saturday	11Saturday
11/10/2002	Sunday	Sunday	11Sunday

11/11/2002	Monday	Monday	11Monday	
11/12/2002	Tuesday	Weekday	11Weekday	
11/13/2002	Wednesday	Weekday	11Weekday	
11/14/2002	Thursday	Weekday	11Weekday	
11/15/2002	Friday	Weekday	11Weekday	
11/16/2002	Saturday	Saturday	11Saturday	
11/17/2002	Sunday	Sunday	11Sunday	
11/18/2002	Monday	Monday	11Monday	
11/19/2002	Tuesday	Weekday	11Weekday	
11/20/2002	Wednesday	Weekday	11Weekday	
11/21/2002	Thursday	Weekday	11Weekday	
11/22/2002	Friday	Weekday	11Weekday	
11/23/2002	Saturday	Saturday	11Saturday	
11/24/2002	Sunday	Sunday	11Sunday	
11/25/2002	Monday	Monday	11Monday	
11/26/2002	Tuesday	Weekday	11Weekday	
11/27/2002	Wednesday	Weekday	11Weekday	
11/28/2002	Thursday	sunday	11sunday	holiday/Sunday
11/29/2002	Friday	sunday	11sunday	holiday/Sunday
11/30/2002	Saturday	sunday	11sunday	holiday/Sunday
12/1/2002	Sunday	Sunday	12Sunday	
12/2/2002	Monday	Monday	12Monday	
12/3/2002	Tuesday	Weekday	12Weekday	
12/4/2002	Wednesday	Weekday	12Weekday	
12/5/2002	Thursday	Weekday	12Weekday	
12/6/2002	Friday	Weekday	12Weekday	
12/7/2002	Saturday	Saturday	12Saturday	
12/8/2002	Sunday	Sunday	12Sunday	
12/9/2002	Monday	Monday	12Monday	
12/10/2002	Tuesday	Weekday	12Weekday	
12/11/2002	Wednesday	Weekday	12Weekday	
12/12/2002	Thursday	Weekday	12Weekday	
12/13/2002	Friday	Weekday	12Weekday	
12/14/2002	Saturday	Saturday	12Saturday	
12/15/2002	Sunday	Sunday	12Sunday	
12/16/2002	Monday	Monday	12Monday	
12/17/2002	Tuesday	Weekday	12Weekday	
12/18/2002	Wednesday	Weekday	12Weekday	
12/19/2002	Thursday	Weekday	12Weekday	
12/20/2002	Friday	Weekday	12Weekday	
12/21/2002	Saturday	Saturday	12Saturday	
12/22/2002	Sunday	Sunday	12Sunday	
12/23/2002	Monday	Monday	12Monday	
12/24/2002	Tuesday	sunday	12sunday	holiday/Sunday
12/25/2002	Wednesday	sunday	12sunday	holiday/Sunday

12/26/2002	Thursday	sunday	12sunday	holiday/Sunday
12/27/2002	Friday	Weekday	12Weekday	
12/28/2002	Saturday	Saturday	12Saturday	
12/29/2002	Sunday	Sunday	12Sunday	
12/30/2002	Monday	Monday	12Monday	
12/31/2002	Tuesday	Weekday	12Weekday	

DATE			FIPSST	FIPSCNTY	STATE	PLANT_ID

PLT_NAME	CO_18_TPD	NOX_18_TPD	O2_18_TPD	OC_18_TPD	M25_18_TPD	M10_18_TPD	EC_18_TPD
DOMTAR INDUSTRIES INC- ASHDOWN MILL Total							
ENTERGY ARK- INDEPENDENCE Total							
ENTERGY ARK-WHITE BLUFF Total							
JOHN L MCCLELLAN GENERATING STATION Total							

**SWEPCO-FLINT CREEK
POWER PLANT Total**
Grand Total

H3_18_TP	NOx	SO2
----------	-----	-----

3839.49543241.39995

16121.40089786.19175

9242.09915969.6409

287.81265 0.11676

4334.519442896.1489

33825.32751893.49826

DATE			FIPSST	FIPSCNTY	STATE	PLANT_ID	PLT_NAME
							AECC - Carl E Bailey Generating Sta Total
							DOMTAR INDUSTRIES INC- ASHDOWN MILL Total
							Entergy Arkansas - Lake Catherine Total
							ENTERGY ARK- INDEPENDENCE Total
							ENTERGY ARK-WHITE BLUFF Total
							JOHN L MCCLELLAN GENERATING STATION Total

**SWEPCO-FLINT CREEK
POWER PLANT Total
Grand Total**

CO_02_TPD	NOX_02_TPD	SO2_02_TPD	VOC_02_TPD	PM25_02_TPD	PM10_02_TPD	NH3_02_TPD

NOx	SO2
-----	-----

149.36606380.50435

727.03275260.17015

363.51007 4.10167

593.031465014.7613

7055.5395787.11009

277.87033451.17586

079.9005411165.104

246.25071062.92742